

## PROTEOLIPOSOMES AND ITS DERIVATIVES AS ADJUVANTS INDUCERS OF CITOTOXIC RESPONSE AND THE RESULTANT FORMULATIONS

### CLAIMS

5

1. Vaccine adjuvants characterized by a Proteoliposomic structure or a derivatives of it capable to induce CTL response.
2. Vaccine adjuvants like in claim 1, characterized by a bacterial origin.
3. Vaccine adjuvants like in claim 2, that come from *Neisseria* or *Salmonella* genus
- 10 4. Vaccine adjuvants like in claim 1, which express the antigens of interest from a strain modified by genetic engineering.
5. Vaccine formulation characterized by including the adjuvants described from claim 1 to 4, one or more antigens of interest as well as suitable excipient.
- 15 6. Vaccine formulation like in claim 5, characterized by the insertion of the antigen (s) of interest in the lipidic bilayer of the Proteoliposomes being also present in its derivatives.
7. Vaccine formulation like in claim 5, characterized by the conjugation of the antigen (s) of interest to the Proteoliposomes being also present in its derivatives.
8. Vaccine formulation like in claim 5, characterized by the co-administration of the
- 20 antigen (s) of interest with the Proteoliposomes or its derivatives.
9. Vaccine formulation like in claim 5, characterized by a concentration rank of the Proteoliposomes or its derivatives between 1 and 50  $\mu\text{g}$ , particularly between 5 and 25  $\mu\text{g}$ .
10. Vaccine formulation like in claim 5, characterized by a concentration rank of the
- 25 antigen (s) of interest from 0.1 to 20% of the mass of the Proteoliposomes or its derivatives, particularly from 0.5 to 10%.
11. Vaccine formulation like in claims 5 to 10, which administered intramuscularly, intraperitoneally, intradermally, subcutaneously or mucosally by oral/feed or nasal/respiratory routes or by genitourinary tract.

12. The use of vaccine formulation like in claims 5 to 10 to protect mammals susceptible to infections and to treat tumoral diseases.

13. Immunization schedule using vaccine formulation like in claims 5 to 10, characterized by the application of three doses as maximum to achieve a profilactic effect and five doses as maximum to achieve a therapeutic effect.